

New-York Horticultural Society
Richard Summer Esq
Baltimore
179
ADDRESS

PRONOUNCED BEFORE THE
NEW-YORK
Horticultural Society,

IN THE
LITERARY AND PHILOSOPHICAL HALL OF THE INSTITUTION,
ON THE
ANNUAL CELEBRATION,

AUGUST 29, 1826.

BY SAMUEL L. MITCHILL,

ONE OF THE MEMBERS OF THE COUNCIL; CORRESPONDENT OF THE IMPERIAL AND ROYAL SOCIETY OF AGRICULTURE FOR AUSTRIA, IN VIENNA; OF THE ACADEMY OF GEORGOPHILISTS IN FLORENCE; AND OF THE SOCIETY IN PARIS, FOR PROMOTING PHYSICAL AND NATURAL SCIENCES; HONORARY MEMBER OF THE PHILADELPHIA SOCIETY FOR PROMOTING AGRICULTURE; OF THE BERKSHIRE SOCIETY FOR PROMOTING AGRICULTURE AND MANUFACTURES; OF THE AGRICULTURAL SOCIETY OF NORTH-CAROLINA; ASSOCIATE OF THE ROYAL SOCIETY OF SCIENCES, AGRICULTURE, &c. AT NANCY, IN FRANCE; OF THE CÆSAREAN ACADEMY AT MOSCOW; OF THE ROYAL PHYSICO-MEDICAL SOCIETY AT PALERMO, &c. &c.



NEW-YORK :

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OFFICERS

OF THE

NEW-YORK HORTICULTURAL SOCIETY,

ELECTED ON THE 29TH AUGUST, 1826.

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At the Anniversary Meeting of the NEW-YORK HORTICULTURAL SOCIETY, held on the 29th day of August, it was

UNANIMOUSLY RESOLVED,

THAT a Committee be appointed to wait on SAMUEL L. MITCHILL, M. D. and solicit a copy of the learned and eloquent Discourse this day delivered before the New-York Horticultural Society. Whereupon the following gentlemen were appointed :

JOHN R. MURRAY, Esq.
MARTIN HOFFMAN, Esq.

WILLIAM BURTSSELL,
Recording Secretary.



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Address,

DELIVERED TO THE HORTICULTURAL
SOCIETY OF NEW-YORK.



GENTLEMEN OF THE
HORTICULTURAL SOCIETY,

IT has been long and often debated whether art surpassed nature ? On this question there is no doubt on my mind, that in a qualified sense, nature is improved by art. I do not mean by this observation that artificial flowers are so beautiful and exquisite as natural blossoms ; nor that factitious fruits of wax and marble, have attained the excellence, even in appearance, of real productions. But I mean to say, that in numberless instances, skill has done wonders in improving the original state of things, and in meliorating their primitive condition. The cultivation of the earth furnishes abundant evidence in proof of this assertion ; for in no department of human exertion has man given a more triumphant display of his useful powers.

To be convinced of this, we may take a brief survey of the globe, before it was altered and subdued by cultivation.

The early navigator, on approaching this land from the eastern hemisphere, saw hummocks and beaches skirting the shores and bearing a few maritime vegetables. Interspersed with these barriers, chafed incessantly by the breakers and waves, were downs, or collections of dry sand, scattered over plains, or heaped into piles by the winds. Beyond these, marshes and swamps spread to a

considerable extent, and bore a numerous crop of aquatic plants. Then rose the forest, with its covering of trees, shrubbery, and humbler growth. Here and there the sylvan scene was diversified by savannas, or spots not productive of woods, and known by the name of natural meadows, or prairies. In other tracts, reefs of scattered rocks, or their continued and solid strata, afforded signals of danger to the approaching emigrant. Many parts of the upland were beset with their hardened masses, extending over the surface, and rising into crags and mountains. Through this desert and wilderness, it was difficult to travel, or find a way. Briars, thorns, prickly pears, and nettles, frequently opposed the march. Poisonous plants often gave annoyance. Fallen trees and brush presented serious obstacles, while the intertexture of bushes and vines, offered impediments not easy to overcome. Bogs, ponds and streams increased the difficulties of passing.

In these regions, yet unfrequented by cultivated or civilized man, the sparse tribes of savages, here and there, had formed a settlement, or roamed from place to place in quest of food, or safety. Being yet a hunter, and subsisting chiefly by the slaughter of the creatures inhabiting the earth and the water, he had attended very little to the cultivation of the ground. The first act of clearing away the natural growth of vegetables, was probably for the purpose of constructing a habitation. Poles and bark would be essential to the formation of the rudest hut. Fire was a powerful agent in subduing the thickets: And the dawnings of planting or gardening, if they may be so called, seem to have commenced with maize, beans, and perhaps, tobacco; reared on a patch laid open to the rays of the sun. To this scanty amount of produce were added the casual articles procured in their season, from berries and other wild fruits, from native bulbs and alimentary roots. War and the chase were the chief employments.

The trackless woods were tenanted by wild animals. The panther and the lynx; the bear, racoon and badger;

the wolf and the fox ; the otter, the fisher and muskrat, had their appropriate habitations. The rabbit and hare ; the various species of squirrels ; the several kinds of deer ; the opossum ; the marmot, and numerous family of rats and mice, had their respective abodes. The beaver constructed his dam, and the mole elevated his hillock.—Terrific reptiles abounded in the thickets ; among which the serpent that attracts notice by his rattle, and the snake which bears the distinguished name of sachem, were conspicuous ; alarming those who invaded their haunts, with their venom or voracity.

Amidst such appearances and productions of nature, the civilized man came forward to make improvement.—Important alterations soon followed. Of the natural growth, there is but a moderate number of vegetables, much prized by him, for culture. Comparatively few of those enumerated by the botanist, are deemed worthy of preservation in gardens, or on farms. Thick as they overspread the soil, they are soon doomed to destruction. Steel and fire exerted their joint forces of extermination. Land was wanted, for the propagation of the more useful kinds ; and to make room for these, most of the native productions were removed as trash. By the laborious operations of grubbing and burning, the surface was at length cleared. Many of the nemorose and sylvatic plants, perished after the removal of the trees that shaded them, merely by exposure to the rays of the sun. The rest soon yielded to the hoe and plough.

Having thus given a display of his industry in this work, termed clearing the land, other operations were to be performed. Where there was too much water, draining and ditching, in addition to solar evaporation, were necessary to carry off the surplusage. In situations where there was too little of this needful fluid, irrigation spread it over the ground. Inclosures were made for the double purpose of constituting a bound-

ary between an individual proprietor and his neighbour, and also for parcelling out his own possessions into convenient fields and lots. According to his fancy or the proximity of materials, the thorn and the privet gave their living bodies ; the chesnut and the cedar their dried trunks, and the mineral strata, their imperishable masses.

To accomplish the main object of the rural economist, it behoved him to know what crop his lands would best produce, according to the qualities of soil, and climate ; whether tillage or pasturage was preferable, or a mixture of the two. Then came on the choice between the several vegetables ; as besides wheat, rye, oats, barley, tobacco, cotton, rice, flax, hemp, clover, timothy, and the other grasses, numberless other articles courted a preference.

We thus see that man, with his skill and industry, has transformed the face of nature. He has made it wear a novel and improved aspect. The productions of different and distant lands have been reared in one place, and in situations where they never naturally grew.

The tillage of the earth, in extensive farms and plantations, has been denominated agriculture ; while the more careful management of it, in narrow limits, and small tracts, is termed gardening ; or, in more modern language, horticulture. It is here that the lord of the soil manifests his greatest ability. Your weekly and elegant exhibitions, show the degree to which the art has already advanced.

In visiting the grounds of several members belonging to this society, the eye is attracted by alluring and excellent objects. It beholds culture by the best of tools and implements ; the most effectual methods adopted to eradicate weeds ; the greatest care taken to introduce proper manures ; and excellent economy in the performance of labour. It is charming to examine the orange and the camellia ; as well as the rare plants of New-Holland and the Cape of Good Hope, thriving under their care.

In such a state of things, it might be supposed there was very little to offer in an annual address, like the present ;

yet, on consideration, on a subject so copious, several observations may be made.

I recommend to your particular consideration, the extension of your intercourse with similar societies, and botanic agricultural establishments in different parts of the world. In some countries, extensive and important gardens are endowed by the sovereign, in other cases they are sustained by associations or companies, and in yet other instances, by individuals of wealth and taste. Generally one person at least of learning and science, has the chief administration, and he mostly takes particular pains to exchange seeds, roots, cuttings, drawings and entire plants, with institutions similar to his own. The great benefits that may be derived from such correspondence, recommend it in an especially manner to notice. (*See note A.*) The functions of the corresponding secretary in these relations become very important, and indeed render him one of the most operative members of the society. In the actual state of peace in our own country, in Europe, and in the greater part of South America, the greatest facilities are afforded to such communications; and the wide range of our navigation reaching the shores of almost all parts of the civilized, and even the uncivilized world, adds incalculably to the means. Seeds have been received from the public gardens in Batavia and Cuba, as well as from those of Paris and Kew. It is desirable in every practicable instance to procure catalogues, for the purpose of knowing the species under cultivation, and also their classification and disposition.

It is hoped that a place may, in due season, be provided for the general use of the society. Such a garden would be honourable, ornamental and useful. Let us indulge the expectation that such a noble institution is preparing, and will be, before the lapse of many years, in full operation. In the mean while experiments must be made by the members on their own grounds. Their friends and associates can be invited to witness them; or the products

in all allowable cases can be brought to the exhibitions ; or again, the facts may be reduced to writing, and read as a memoir at the meetings.

These remarks lead to the importance of registering all the important or novel objects occurring to the members, their acquaintances and correspondents. The human memory, at best, is but a frail depositary ; desuetude renders it weak ; disease and age impair it ; and at last death abolishes it. Matters of moment ought therefore to be recorded. For the purpose of a single person, or sometimes, of a society, writing may suffice ; but if it is intended to lay them before the public, for instruction, they must be committed to printing. By this means, they may be diffused as well as perpetuated ; they may gain renown for the author, while they convey intelligence to his readers. If after the grand example of the London Society, you could publish from time to time a book of your transactions, it would be eminently creditable, but until this can be accomplished, it is surely worth the while to form the history of your doings. These must unavoidably embrace transactions and events worthy of being known. Such minutes of proceedings, though they might not contain things vast or wonderful, might, and I take it upon me to say, would, contain interesting information ; and this, instead of being kept like seed in a bag, within the scribe's desk ; or left to perish, like a plant by the way-side, with the fugitive columns of a newspaper, ought to be permanently fixed on the pages of one of the respectable periodicals, which our age has produced.

I congratulate you, on the progress already made, in gathering materials for your library ; I encourage you to activity and perseverance : though the collection is still moderate, it must be borne in mind that it has been but recently established : taking all things into consideration, it is a good beginning. Books, being the repositories of knowledge, are indispensable to the inquiring man.— Their excessive multiplication, however, in modern times,

increases largely both the labour and expense of study. Instead of attempting, therefore, to procure every publication bearing a horticultural, or a kindred title, efforts should be directed as particularly as circumstances permit, to procure a moderate number of standard and classical volumes, and when to those are added, a good supply of the journals, magazines and tracts upon the different branches of the subject, you will have made comfortable provision. As you have lately appointed a select committee to take measures for increasing your stock, I respectfully suggest to the members acting on that delegation, the importance of extending their exertions beyond books merely. Topographical maps of gardens: (*See note B.*) drawings of buildings; of the modes of affording heat and light; and of the mechanism for watering, are worthy of being collected. So are delineations of vegetables, remarkable for their rarity, beauty or usefulness; and figures of the insects that are ever marring the gardener's labour. All these, and other similar articles, ought to be carefully kept in port folios provided for the purpose, and preserved from being spoiled by folding.

I cannot refrain from urging the propriety of forming, with all practicable speed, a Herbarium, called also a dry garden or *Horcus Siccus*. This is easily accomplished; for every member may contribute his quota. A sheet of wrapping-paper and a sprig of amaranth, will answer for a commencement; and the collection may be continued, until quires or reams shall be filled with preserved vegetables. Particular attention should be given to embody in this Herbarium, every plant esteemed for its ornamental or useful qualities; each that is troublesome as a weed; and all that are noxious as poisons. It will be delightful to examine, as occasion may prompt, the labelled specimens. The exercise will be peculiarly agreeable to the members in winter. The view will be a rich treat to scientific and intelligent visitors, at all times.

Nor ought I to omit, that a greater regard than heretofore, be shown to the department of natural history

called entomology. Insects seem to be the most numerous class of the animal race ; and a very great number of them is directly or indirectly hostile to man. It becomes us to know them, as a body of restless and implacable enemies. They are within the reach of the members, and ought to be caught in the several forms of metamorphosis ; at least in the state of grub, (or lava,) of nymph, (or chrysalis,) and of perfect insect, (or imago.) It is easy to preserve them in fine style and character ; with very little expense or trouble they may be kept from decay for many years. They may be examined at all seasons, to singular advantage. The vermin of those tribes that annoy our forests, fields and gardens, deserve exhibition, in all their mutations and disguises. I exhort you to undertake the collection of these powerful ravagers ; so that the invaders of the oak, the locust, the apple, the cherry, the pea, the wheat, the rose, the grasses, and every other vegetable, precious to cultivators and proprietors may be thoroughly known, to the end that their lives may be destroyed, or their mischief prevented.

It seems to me that there is room for more minute and extensive observations on manures. Their particular employment and the theory of their action, require further elucidation. But our proximity to a great and growing city, invites a statement of the subject in reference to our immediate locality. Among the fertilizers of the soil, high importance is attached, and deservedly, to that mass of matter which results from the process of putrefaction upon organic substances undergoing corruption after death. By reason of its efficacy, it is assiduously procured to fertilize poor soils, to renovate exhausted ones, and prevent good ones from wearing out. Animal manures have a peculiar rankness. Some of them stimulate, or, I might almost say, cauterize with vehemence. Hence they require admixture of milder materials to mitigate their force. Yet, after the offal and scrapings of large cities, have been mingled with soil in such proportion as not to destroy the life of

plants, but to promote their vegetation; they have been considered as communicating in many cases, a disgusting or offensive quality to some of the vegetables they nourish. They have been charged with imparting a biting and acrimonious taste to radishes and turnips. Cabbages are less sapid and delicate. Potatoes have been observed to borrow the foul taint of the ground. It has been traced to the bulb of the onion. Millers observe a strong and disagreeable odour, in the meal of wheat that grew upon land highly charged with the rotten recrements of cities. The like deterioration of quality, has even been remarked in tobacco raised in cow-pens. And stable-dung has been accused of imparting a disagreeable flavour to asparagus. It seems as if some portion of the foul matter of the manure was absorbed by the vegetable radicles, and after passing unassimilated through the sap vessels, was converted by the process of nutrition to living substances.

This condition of the vegetable species, seems to receive illustration from analogies in the animal reign. Ducks are rendered so ill-tasted from stuffing down garbage at the kitchen door, as sometimes to be offensive when brought as food to the table. The quality of pork is acknowledged to be modified by the food of the swine. The bitterness of partridges has been ascribed to the buds upon which they live; and the peculiar flavour of piscivorous wild fowl, is rationally traced to the fish they devour. Thus a portion of nutrimental matter passes into the living bodies of plants and animals, in certain proportion, without having been entirely subdued, or assimilated. It becomes therefore a subject of curious and important reflection. The horticulturist, I know, mostly calculates on the quantity of his crop. I think it a becoming subject of research, that he should likewise attend to the quality; or perhaps the consumer, his customer, may inform him that an offended palate and injured health, will induce a careful provider, to seek uncontaminated articles for his table.

There is an admirable aptitude in the natural order of the gramina, or grasses, to spread over the earth, and to accommodate themselves to different altitudes and latitudes. Wheat, oats, barley, and I place among them maize or Indian corn, possess wonderful facilities of propagation; nor is the acquirement of new habitudes peculiar to these—it obtains in many others. The robinia, or locust tree, so precious for its fragrant flowers and solid timber, was brought to Long-Island from the south. I have seen the magnolia tripetala near Presque Isle, on the southern shore of Lake Erie. The pride of China, or melia, is becoming acclimated, and may be expected, by gradual approaches, to bear the rigour of our winters. In short, I call your attention to the naturalization of vegetables. Much has been done by management in changing their primitive habits, in many instances. There is no doubt that more remains to be done. There are two chief difficulties to overcome: one is, to reconcile the vegetables of hot climates to colder regions; and the other is, to reconcile the inhabitants of mountainous tracts to low and maritime situations. You cannot fail to appreciate the importance of experiments upon these extensive subjects.

I introduce here the efforts made at this place, and in its vicinity, to domesticate the highly extolled arachaca, or esculent root of Bogota. I had succeeded in obtaining the roots of this plant, from the late Baron De Shack, at Trinidad, (*see note C.*) and from Mr. Mitchell, at Caraccas. The latter consignment was in a growing condition; and without delay, put under the protection, it being in November, 1824, of a worthy member of this Society. It is esteemed as one of the most useful vegetables in South America. It belongs to the natural order of the umbelliferæ, and is called *apio* by the Spaniards, from the resemblance it bears to parsley and celery, belonging to the genus *apium*. De Shack, however, assured me it was a *conium*. The roots, at a short distance under the

surface, divide into numerous branches, each of which, in proper soil and favourable season, will approach the size of a cow's horn. They are esteemed more highly than potatoes of any kind, and are in universal use for food, by the inhabitants of all classes. In Santa Fe and the surrounding country, and wherever also they can be got, they are most eagerly sought after. It appears that the native region of this plant is about 8000 feet above the level of the sea, and in a medium temperature of 58 or 60 degrees of Fahrenheit's scale. The attempts hitherto made to introduce the arachaca into cultivation in the maritime situations of the temperate zone, within the northern hemisphere, have not hitherto been successful. The plant grew luxuriantly, as to stem and leaves, in Trinidad, but was deficient in roots. The individuals brought to New-York thrived for a while in Mr. Floy's green-house, but afterwards perished, on removal to the open garden. It may be questioned whether the arachaca can ever be even rendered productive in our climate. Nevertheless, I think with the horticulturists of Glasgow, that by care and attention in propagating this invaluable plant, by seeds as well as by roots, it may be accommodated to situations where it must bear a heavier weight of atmosphere, and the changes of a higher latitude. Although the prospect seems rather discouraging, I recommend further exertions to add this dietetic and economical vegetable to our circumscribed stock.

I fear something of a like event, in the case of the single-leaved and shaggy-rooted potatoe, forwarded by Dr. Finlar and Commodore Hull, from the coast of Peru. (*See note D.*) The plant grows wild on the mountain summit of St. Lorenzo, and its roots are good for human sustenance. Several of those which I planted, withered without any assignable cause, and died. One of the survivors for a while looked very well, and I expected a show of flowers and fruit. Another was coming forward, but within a few days the blossoms have withered. Several

flowers were produced by the plants, which grew from the roots I gave to David Gelston, Esq. I wrote a communication on the subject, some time ago, to this Society; and I have since despatched a letter, with a coloured figure, from nature, to Mr. Secretary Sabine, for the Horticultural Society of London. It is scarcely to be expected that this tuberous root will supersede, or even equal the common round potatoe. It is, nevertheless, a part of our business to become acquainted with it, and to estimate correctly its value. Upon the supposition that it was an undescribed potatoe, and a tuberous one too, I named it from the place whence it was sent to us, *Solanum Laurentii*, or the St. Lorenzo potatoe. I hope we shall push the experiments their full length, and I am the more encouraged to expect this will be done, inasmuch as I availed myself of a favourable occurrence to place a parcel of the roots in the hands of the Honourable Josiah Quincy, who informs me he has distributed them among some of the ablest cultivators at Boston. Our intercourse with South America, brings to us more of its productions than we could possibly have obtained in its provincial state. By the kindness of my friends, Munson and Storer, I have it in my power to exhibit before you, three species of the epidendrums, or air plants, from Buenos Ayres; vegetables having roots indeed, but employing them to draw nourishment, not from the earth, but the atmosphere.

Connected with these proceedings, is the easy and perfect introduction of certain other vegetables; the willow of the Euphrates, and the poplar of the Po, for example. The tall and erect branches of the latter, the flexible and slender twigs of the former, and the neat foliage of both, have rendered them almost universal favourites. When to these properties are added two others, to wit, ready propagation by cuttings, and rapid growth, their general introduction can be comprehended. Yet why, I would ask, are the stately and superb tenants of our own forests neglected, to make room for such inferior exotics.

Our tulip tree, (*liriodendron*) grand as it is in stature, peculiar in leaves, and elegant in flower, is treated with contempt. Our lime tree, (*tilia*), noble in its aspect, and singular in its blossoms, has nothing to hope from man, but every thing to fear. Of our nine species of poplar, several grow to the height of from forty to eighty feet. From the thirty-four species of oak inhabiting our woods, the quercitron, the iron oak, the white oak, and the mountain oak, raising their tops from fifty to sixty feet high, and spreading their side boughs to a correspondent extent, would afford the most venerable, and I may say, druidical improvements to our lanes and lawns. Our platanus, or button wood, acquiring the greatest magnitude of any tree in North America, and not unfrequently measuring from ten to fifteen feet in diameter, is entitled to somewhat more consideration than it seems to have received. Among our nineteen sorts of *pinus*, the American silver fir, the hemlock spruce, the white pine, and the black larch, are some of the grand productions from which selections for plantations may be made. Let me entreat you to intercede with the proprietors of the soil, and with the conductors of public and private decorations, to receive these, or some of them, into their favourable opinion, and to stay the cruel and unrelenting proceedings which are fast thinning their numbers, and threatening some of their races with extermination.

Certain of our wild and indigenous fruits merit a share of my regard on this occasion. I have long thought that out of eighteen species of *prunus*, the Chicasaw plum and the maritime plum, at least were worthy of introduction to cultivated grounds, as native curiosities, or elegant rarities, as well as for the benefit of their yellow and purple fruit. Why is not the *pyrus coronaria*, or sweet-scented crab tree, whose fruit is eagerly sought after for making preserves by the ladies, and whose sweet-scented and beautiful flowers are among the gay ornaments of the spring, more frequently seen in our plantations? The same query might be put in relation to the *shrub-craneberry*, or *vacci-*

nium oxycoccus, one of the ornaments of the forest, with berries red, agreeably acid, and good substitutes for the common craneberry, or vaccinium macrocarpon? and to the two sorts of sorbus, decorating the mountains; one bearing a purple, and the other a scarlet fruit? and a like demand might be made whether, of the six species and their varieties of the *vitis*, Bland's grape, the summer grape and the bullet grape, at least, are not worthy of cultivation?

It may be expected I should speak to you of meteorological observations. I have, however, not much to say in favour of their utility to practical men like yourselves. The thermometer indicates the degree of heat indeed, in the spot where it is placed, and therefore has its use in the green-house and the hot-house. It may be employed too to determine the temperature of waters from the well or the cistern. The barometer, which indicates the greater or less weight of the atmosphere, seems to be of very limited use in this country as a weather-glass. Neither of these instruments affords any means of predicting the heat or the cold; the winds or the storms of the coming seasons: and the long columns of figures we find in some of the books under that title, are of as little real value as almost any thing we find in print. To note the rise and fall of the mercury as minutely as some persons have done, seems to be a waste of time, or a misapplication of attention. The hygrometer, though it may give signs of the moisture in the air, and the ombrometer determine by approximation, the quantity of rain that falls, afford not the smallest relief when gardens suffer by too much humidity, or are scorched by drought. The electrometer is of as little practical use. Lightning breaks forth and ceases again, according to the laws beyond mortal control. It has nevertheless been remarked, that some trees are better conductors of this splitting and igniting element than others. The locust is, by way of illustration, very frequently rent to shivers by it; while it is affirmed, on credible evidence, that the beech is never the subject of its

violence. In some districts of our country, it is customary, I am told, for persons who are abroad during a thunder storm, to place themselves under the protection of this tree. If this, upon further inquiry, be found to be the fact, it might be a matter of precaution against its visitations to form hedges, coppices and rows of this non-conducting fagus. (*See note E.*)

I was charmed a few days ago, with the examination of the young ladies, at one of our respectable schools, on Botany. They answered the questions put by their instructress, without hesitation, as they seemed to have learned the lessons with pleasure. There is, perhaps, not a more agreeable feature in our social system, than the exertion to inform the female mind. We were all fondled in female arms, dandled on female knees, and taught by female lips, before we were delivered over to the pedagogue. During these exercises, the principal portion of which lie beyond the reach of adult recollection, we acquired the rudiments of the most substantial knowledge. As our mothers and nurses imbue the infant with the earliest ideas, and commence the formation of the strongest habits, their education is a matter of the utmost moment. Make the women christian, and our religion is safe; make them patriotic, and the republic is secure; make them intelligent, and the soul shall be exalted. A short anecdote will evince the sway of the fair sex. A bouquet in the possession of a belle, attracted the notice of an inquisitive swain. She answered his queries, by telling the ignorant fashionable, the common terms of the flowers, accompanied with the generic and specific names, according to the classification of Linnæus. The beau was so humiliated and confounded, that he betook himself to the science, the better to qualify him for her company.

Indeed there is something in the verdure, bloom and pericarp of vegetables, that pleases almost all human beings. Stanzas of verses prepared for children are now under recitation by my little girls:

A rapturous prospect out yonder is seen :
 Fields, forests and meadows all clothed in green :
 And though to enjoy it, the day long we try,
 It never grows tiresome, nor wearies the eye.

And this :

The garden looks beautiful after the showers :
 Come, let us go, sister, and pick a few flowers :
 For the violets, the daisies, the pinks and the roses,
 Will give us the means to make sweet pretty posies.

And also another uttered in my ear as I write :

We hope, dear papa, it will presently suit
 To walk in the orchard and gather some fruit ;
 Where the trees in their season successively bear
 The apricot, cherry, peach, apple and pear.

A garden was accordingly appropriated to man, in the state of innocence. Such a place is made, in the Canticles, the abode of pleasure. The embellishments around the grotto of Calypso, and near the palace of Alcinous, have engaged the descriptive talent of Homer, to display their ornamental effect. The muse of Tasso, has seldom been more felicitous, than in sketching the magic scenery of Armida's residence. The Botanic Garden of D'arwin, is a poem replete with erudition, taste and science. The Straw Bonnet, or Capello de Paglia, of Signore Largi, a modern Italian bard, is said to be full of fancy and wit. I have sent to Florence for a copy, which has not yet come to hand. Among the almost numberless publications on rural affairs, I mention with satisfaction a volume of Brazilian Georgics, published in Latin hexameter verse, some years ago, in the name of Prudentio Amaralli, at Lisbon. They treat of the cultivation of manioc ; the management of cattle ; the planting of tobacco, and the manufacture of sugar, all treated in didactic poetry ; evincing profound scholarship and knowledge of the several matters. On this part of my subject, I have time merely to mention the two admirable performances, so honourable to France and England, of Delile and Mason.

The destruction of useless and noxious plants, deserves particular exertion. Complaints continue to be made in the north, of the further encroachment of the Canada thistle, or *cnicus arvensis*. The *cyperus hydra*, or inexterminable grass, overruns, in defiance of the hoe and the plough, the plantations of the south. The *hypericum perforatum*, or St. John's wort, is one of the most unwelcome intruders into the meadows, in our own vicinity. Their perennial constitutions make it very difficult to destroy them. The question has been frequently asked, what is a weed? The correct answer is, that it means any plant that interferes with the crop intended to be raised; and therefore with us, purslain, broad-leaved plaintain, and lamb's-quarters, though good pot-herbs, are generally considered as weeds. But it is remarkable enough, that the *chrysanthemum leucanthemum*, or tall ox-eye daisy, which is considered as a troublesome weed in most parts of the country, is extolled as a valuable plant for affording dry fodder, at the east end of Long-Island.

I cannot avoid mentioning, on the present occasion, the diseases of vegetables. These, like all other beings endowed temporarily with life, are doomed finally to part with it. Before they experience death, they often suffer disorders. These are of two kinds: one internal and recondite, and the other outward and obvious. The former corresponds to the medicine, and the latter the surgery, of human practice. As in animals, some of these distempers are confined to one or a few individuals, and others extend to many, and over extensive tracts; so among vegetables, there are sporadic, limited, and wide-spreading diseases. The destruction of the prim or privet in hedges, more than half a century ago, is not yet forgotten. The malady under which the peach trees linger and eventually die, in our neighbourhood, is a calamity whose visitation has not yet passed away. The hawthorn, or *cratægus*, is scarcely worthy of reliance any more for live fences.

Plum trees have become hereabout less thrifty and productive than formerly, during the period of my own recollection. We have accounts from other parts of our country, that occasionally particular trees in forests, the pine, for example, become inanimate in great numbers, from some internal and secret mischief. It may, perhaps, be the good fortune of one or some of you, to penetrate these mysteries, and develope their occult nature.

Amidst a theme so copious, it is somewhat difficult to stop. It requires some exertion to escape the press of abundance. The time already consumed in uttering the preceding sentiments, admonishes me that I have said enough, and warns me against pronouncing too much.

Yet, before I close, I beg indulgence for employing one breath more. It behoves us to remember that we are unspeakably indebted to divine providence, for the changes of day and night ; for the vicissitudes of the seasons ; for sunshine, with its accompaniments of heat and colour ; for the light of the moon and the starry host ; for rain and dew ; for oxygene and respirable air ; for wind and atmospheric mixture : all afforded us without our care or payment, by the almighty and beneficent giver. And while we offer the acknowledgment and praise of thankful hearts, let us ever be mindful, that we too have a part to perform. Our organization fits us for labour ; and experience amply proves, the health and recompence that result from due application. Employment, indeed, is essential to happiness. Persevering and diversified industry begets skill : and by this can rocks be converted to fences ; water be changed to land ; the barren rendered fertile ; wastes wear the aspect of elegance and plenty ; and the choice productions of nature be augmented and meliorated : and, if it be demanded, where improvements in horticulture shall end, the answer is, that they surpass our present knowledge, and defy the existing rules of calculation !

APPENDIX.



NOTE A.

INTELLIGENCE FROM THE SOUTH.

GENTLEMEN,

I HAVE the pleasure of announcing to you, a communication from the Island of Cuba. It comes from Don Ramon de Sagra, through his friend, Don Thomas Gener, of our city. The main objects are, to give information that a public garden has been established near Havannah; and to open intercourse with institutions for botanical and agronomical purposes, in other places. The parcel contained two articles; one a circular epistle, and the other, a discourse pronounced before the royal patriotic society there, at the general meeting, toward the close of 1825. The former, proceeding from the botanic garden, states, that under the joint auspices of the patriotic society, and the chamber of commerce, a chair has been provided for teaching botany in its relations to agriculture; and that intelligence is solicited on the various and interesting objects it embraces.

The latter contains a description of the botanical school, kept in the garden. In the arrangement of the vegetables, the lecturer decides in favour of natural orders, in preference to artificial system. After an enumeration, in considerable detail, of the more memorable species under cultivation, he states his exertions to form a herbarium, or *hortus siccus*. Such a collection of dried plants, he justly considers, as a necessary appendage to an assemblage of living ones. He then mentions the efforts he has made to establish a correspondence with various botanic gardens and scientific societies; soliciting seeds, plants, drawings, memoirs, and articles of every kind, that they can respectively furnish. He has forwarded his circular to the gardens of Madrid, Cadiz, Barcelona, Montpellier, Nancy, Geneva, Turin, Berlin, Copenhagen, Leipsig, Gottingen, Bologna, Padua, Florence, Rome, London, Oxford and Yarmouth; to the royal societies for promoting the sciences in London and Edinburgh; to the friends of natural studies, at Berlin; to the agricultural associations of Lyons and Caen; the horticultural socie-

ties of London, Tournay and Turin; the Linnean societies of Paris, London and Boston; the royal academies of Turin and Munich; the academies of sciences at Montpellier, Naples and Caen; the lyceum of natural history at New-York; the museum at Florence; and numerous eminent men, and other distinguished establishments. To some of them he has likewise forwarded seeds, dried plants, insects, reptiles, shells, madrepores, and such other things as he supposed would be acceptable. From various quarters he expects corresponding returns.

He entertains bright hopes of establishing a cabinet of natural history. He is occupied in preparing a catechism on Cuban agriculture. He promises a book on vegetable anatomy and physiology; and on descriptive botany, with particular reference to the contents of the garden. His course of instruction embraces also, the remedial qualities of vegetables, as far as they can be introduced.

In making this abstract from the original documents, I am influenced by the hope, that in opening thus, the means of intercourse between two societies, having many similar pursuits, I may possibly aid their respective investigations, and render, in some degree, service to both. I beg you to accept the renewed assurances of my zeal for the cause in which you are engaged.

SAMUEL L. MITCHILL.

New-York, 18th May, 1826.

NOTE B.

ON LANDSCAPE AND PICTURESQUE GARDENS.

By Mr. Parmentier, a Member, &c.

It was reserved to the delicate taste of our age, to make the most happy changes in the art of embellishing gardens, and truly to enjoy the beauties of nature. The English have taken such advantages of the situation and soil of their country, that it forms as it is, merely one vast garden.

A good choice of the spots to be cultivated, and of those which should contain groups of trees, ought to be made; for they not only afford changes highly advantageous to the different points of view, but also add considerably to the value of the property on which they are situated. When united to these there is a river or a

stream, what new advantages are presented for embellishing a garden. The country seats which surround the city of New-York, are most beautifully situated, but we cannot avoid a feeling of regret at not seeing them accompanied with some plantations and groups of trees happily disposed, which would not only add to their beauty, and afford cool and shaded walks, so agreeable during the heats of summer, but would have the advantage of increasing the real value of the property, in proportion to the number and value of the plantations made. A few paths winding without restraint through the grounds, and leading to those parts the most beautiful, not only on account of the view of the water, but also of that of the neighbouring country seats, would lend a new charm to the habitation. A few fabrics, rustic bridges, hermitages, a temple, or a Chinese kiosk or pagoda not expensive in their execution, would advantageously complete the embellishment of a country seat.

These kind of gardens are not very expensive, the unevenness of the soil being rather a beauty than otherwise, and of which advantage would be taken. If there are already cultivated grounds, they shall not be rejected; for every thing that produces is interesting—only they should not form the principal object.

Mr. Andrew Parmentier, lately from Europe, where these gardens are generally adopted, has made at his place, at the division of the Jamaica and Flatbush turnpikes, at Brooklyn, L. I. a garden of this kind, which will be the more interesting on account of the great variety of foreign trees and plants he has there introduced. It is but half an hour's walk from New-York.

Mr. P. by the advice of several of his friends, will furnish plans of landscape and picturesque gardens; he will communicate to gentlemen who wish to see him, one collection of his drawings of cottages, rustic bridges, Dutch, Chinese, Turkish, French pavillions, temples, hermitages, rotundas, &c. For further particulars, inquire personally or by letter, addressed to him, post paid, which will be attended to.

March, 1826.

NOTE C.

Extract of a Letter from the late Baron ED. DE SHACK, Botanical Agent of the Austrian government in Guiana and Brazil, to S. L. MITCHILL, dated Trinidad, 25th August, 1823.

“I will be very much obliged to you to inform me, if you possess in the United States, that very valuable vegetable from Santa Fe, in New Grenada, called *arachaca*, an umbelliferous plant, a *conium*, a substitute for the potatoe. It is the most prolific and nutritive root yet known; the daily nourishment of the poor and rich in that country, and far superior in taste, usefulness and productiveness, to the potatoe. It grows only in the colder regions of the Cordilleras. A more ample description of this celebrated production has been published in Messrs. Prœnig and Smith’s Annals of Botany, vol. ii. page 400. Should you not possess it, or should it not exist in your country, I will be happy to send you a few specimens; for it grows here in my garden with the greatest luxuriance, but never produces either a large tuberous root, or seeds, but only its bulbous branches, by which it is propagated. As it only grows in the colder regions of South America, I have no doubt as to its success in your United States, where it may become a new source of prosperity, not only to the poor, but also to the whole population, which is daily increasing by peace, and the banishment of the small-pox. I have sent the same to various botanical institutions in Great Britain during three years; but they always perished on the passage. This year I have sent a box by itself to Glasgow, and two boxes to Liverpool; but have not yet received any information respecting their safe arrival. The late president of the royal society, Sir Joseph Banks, has the last twenty years of his life, endeavoured to introduce the same into England; but all his exertions proved abortive, because nobody took the trouble to procure the same, or to take the necessary care during the voyage. I send you,” &c. &c.

NOTE D.**INFORMATION CONCERNING THE SUPPOSED NEW SPECIES
OF TUBEROUS POTATOE.****COMMODORE CHAUNCEY'S DESPATCH.**

UNITED STATES NAVY YARD,
New-York, June 12th, 1826.

MY DEAR SIR,

I enclose herewith for your information, extracts from two letters received some time since from Commodore Hull, upon the subject of the wild potatoe, which he found upon the mountains near Callao; a specimen of which I had the pleasure of handing to you some time ago. I now send you a small quantity of Lima beans, and some clover seed, received a few days since from that officer.

I have the honour to be,

With great respect, my dear Sir,

Your obedient servant,

I. CHAUNCEY.

DR. SAMUEL L. MITCHILL.

*Extract of a Letter from Commodore ISAAC HULL, dated
Corillos Bay, 30th July, 1825, to Commodore ISAAC
CHAUNCEY.*

“ There is not a single root, tree, vine or vegetable, that is worth sending to our own dear country, except a potatoe from the mountain, which is very fine. When boiled they are yellow, and of a good flavour. I have some of them now, that I send off to-morrow to Mr. Skinner, of Baltimore, and to our mutual friend, Mr. Smith; and the first chance I get, you shall have your share of any thing else that I find worth sending. Perhaps when the government gets more settled, and a communication is open with the interior, we may find something worth sending home.

“ If you see Doctor Mitchill, will you say to him, that I have found an old friend and a correspondent of his, Doctor — something in Spanish; I cannot make it out. He is a man of great learning, I am told, and at this time he is in great favour with the present government and go-

vernor of Lima. Should the Doctor write to him, and wish me to bring any thing to him on my return, I shall with pleasure do it."

Extract of a Letter from Commodore ISAAC HULL, dated Lima, 27th August, 1825, to Commodore ISAAC CHAUNCEY.

"By Captain Goodrich, of New-Haven, I forward you a small box containing what we believe here to be the wild potatoe. I found it last year on the top of the island of San Lorenzo, in the bay of Callao. About six months ago I sent to Baltimore some of them, with the small ball on the vines, directed to Mr. Skinner, and requested him to send a part of them to Mr. Sewell, of Boston. I have not since heard from these gentlemen, so that I cannot say whether I have sent them potatoes or some other root. Will you see what Doctor Mitchill thinks of them? and if they are what I hope they will prove to be, I shall be happy, as in a letter from Mr. Sewell, I was particularly requested to search for them. You will recollect that I do not pledge myself that they are the potatoe; that I leave to the wise men of our nation to determine.

"On my return, I shall endeavour to bring home such seeds as may be useful to our country.

"I found some time since, in Conception, the thistle; and as it appears much larger than ours, I send you one of the burrs, and some of the seed."

DR. FINSLAR'S LETTER.

FRIGATE UNITED STATES,

Chorillos Bay, Dec. 10th, 1825.

DEAR SIR,

I send for your gratification, some of the original potatoes, so long sought for. These potatoes were found growing in the native state, on the top of the island of St. Lorenzo. Should they not reach you in good condition for cultivation, and should I be so fortunate as to be informed of it while here, I will procure more for you.

I am with the greatest respect,

Yours, &c.

This is from your former pupil,

BENJAMIN R. FINSLAR,

Sur. Mate U. S. Navy.

The Hon. SAMUEL L. MITCHILL, New-York.

THE HON. J. QUINCY'S LETTER.

BOSTON, 12TH JUNE, 1826.

DEAR SIR,

I have the pleasure to state, that the St. Lorenzo potatoes have been received and distributed as directed, in six parcels, to different distinguished agriculturists, who have promised to see that they are carefully attended, the result noted and communicated.

Captain Lewis, of the *Garnet*, being about to visit New-York in a few days, intends to deliver a part of his importation to you ; so that in this instance, you have been able to gratify your neighbourhood, without being obliged as you expected, to practice entire self-denial yourself.

Be assured, Sir, I have received with great interest, this instance of your attention, and desire in behalf of our agricultural interest, to express you my thanks, accompanied by the assurance of the very great respect with which

I am your obedient servant,

JOSIAH QUINCY.

SAMUEL L. MITCHILL, LL.D.

NOTE E.

THE BEECH TREE RESPECTED BY LIGHTNING.

A letter from Fred. Ed. Beeton, M. D. dated at Murrefreesborough, July 19, 1824, states, that the American variety of the *fagus sylvatica*, was never assailed by atmospheric electricity. The writer's words are these: "Neither tradition, nor more authentic history, give any account of injury having been sustained by a beech tree, from the effects of electricity. So notorious is that fact, that in Tennessee, it is considered almost an impossibility to be struck by lightning, if protection be sought under the branches of a beech tree.

"At any time when the heavens wear a nebulous garment, and the thunders roll above the Indians, they betake themselves to the nearest beech tree they can find, let their pursuit at the time of the storm be what it may.

"The sagacity of observation possessed by these children of nature, has long since taught them, that under the beech, they may rest fearless of threatening danger and grumbling thunder. Other trees may be surrounded by these and shivered to splinters, while the beech remains entire and unhurt."

The case is analogous to the reported story of the *laurel*, (*laurus nobilis*), being incapable of a wound from the thunderbolt. This plant was consecrated to Apollo, who, shielded by its influence, was emboldened to defy the fulmen of Jove. It was decreed as the crown for victors and successful poets; because, under its protection, they might rest easy while carpers and cavillers were trying their worst. In the famous Anacreontic song, Phœbus is made to show his laurel to Jupiter, with the words—

Sic evitabile fulmen, &c.

It was hoped that, as this tree, whence the bards derived *their bays*, was a native of Spain, Italy and the Levant, and not yet naturalized in our country, observations might be made by competent persons to determine whether the ancient legend has any foundation in fact.

The metamorphosis of the nymph Daphne into such a laurel is classically recollected.

If the beech tree possesses this protecting influence, the swain Tityrus, named in the first eclogue of Virgil, must have enjoyed a double share of security; inasmuch as he was safe from the flash or stroke of the clouds, while he reposed in the shade of the wide-spreading branches for which the beech is distinguished.

Improvement might and ought to be made of this communication, by planting and rearing beeches near and around the dwelling-houses and barns of our farmers, for the immunity of cattle as well as human beings from the violence of atmospherical electricity.—Let a *beech grove*, as easy to rear as a plantation of *butternuts*, (*juglans cinerea*) accompany every inhabited spot, and let solitary beech trees arise here and there over every farm and plantation.



Answer of Dr. PASCALIS, at the Anniversary of the New-York Horticultural Society, to the toast and sentiment addressed to him as President of the Linnæan Branch of Paris, &c.

MR. PRESIDENT, AND
GENTLEMEN OF THE NEW-YORK HORTICULTURAL SOCIETY,

Rejoicing to receive this honourable notice, I feel the more happy to be delegated for its transmission to the learned institution of Paris, that it will be my duty to point out to their admiration, the conformity of the leading principles which direct your labours and theirs to the same object, which is the extension of practical knowledge in the cultivation of precious plants.

and in multiplying their species, even under the most unfavourable climates. Such is, indeed, the sacred obligation subscribed to in the parent Linnæan Society, and by its numerous branches in the four quarters of the globe, instead of personal rank and emolument, exclusive of local privileges for which many learned associations seem to vie with each other, and by which they have frequently more retarded than advanced the progress of useful knowledge.

The New-York Horticultural Society holds, besides, in equal estimation, the merit of experienced agriculturists, and of practical gardeners, with that of more learned and contemplative theorists. They are aware that from their union and concert alone, those advantages can be secured, which constitute the quality and abundance of fruits, with the improvements of the arts that are dependent upon a prosperous and abundant vegetation, which all civilized nations are called forth to share in and to enjoy. This doctrine is further illustrated in the collection of the annals which the Linnæan Society has ordered me to deposit in your library; but while they have manifested all the kindred feelings that are best calculated to unite fellow-labourers in the same cause, however distant they are from each other, permit me, Mr. President, to notice from those annals, a few of the subjects more particularly connected with the interests of agriculture, horticulture and botany, and which at a more opportune occasion, may become subjects to your lecturers, in conformity to the thirtieth article of your by-laws.

1. The process of abstracting electricity from the clouds, by planting poles covered with twisted straw, as mentioned last year, and thereby guarding cultivated fields against the destructive effects of hail storms, has been fully and successfully exemplified in extensive districts of Germany and Italy, in or about the lower Alps and Appenines; and it is now still further ascertained, that not only metallic, but ligneous or vegetable points, can divert torrents of electricity in different currents; also, that this element is as necessary to plants as pure air or other gases, because by their sharp pointed leaves and thorns, they abstract it from the atmosphere. This subject, which so strikingly evinces the wisdom of the Creator, was experimentally demonstrated by a Linnæan member, who has subjected electricity to positive and negative evolutions, by means of thorny shrubs, and as easily as Franklin drew it from the clouds with a child's plaything, a flying kite, armed with a metallic point!

2. Another prodigious secret has also been revealed to us. It is that of ascertaining which is the best period for early or late sowing, during autumn, or in October. A mistake in this respect, should a soil be clayish or otherwise subject to late droughts, may prove ruinous; and since it is not given to human wisdom to foresee how and when hygrometric vicissitudes may take place, it has been ingeniously devised to procure comparative tables of the rainy days in the course of years, and as many as fifty—then of the rainy days of each year, as far as the last of September; and by the proportion of the mean anterior periods, to judge of the next approaching October completion, on a certainty of forty-six against one! These tables, Mr. President, I will be happy to furnish the Horticultural Society with.

3. In relation to *horticulture*, the London and Paris members have concurred in the same method and principles of defining what kind of climate each precious plant requires. Messrs. T. Frederick Daniel, and Soulanges-Bodin, affirm that such a climate consists in temperature, moisture, electricity, light, and irradiation of plants; besides the required quality of the soil. The views of the French horticulturist, on the spontaneous exsiccation of the plants, and on their relative location under which the requisite conditions of climate are to be artificially procured or modified, are particularly novel and interesting.

4. Sir Humphrey Davy, and Mons. de Paupaille, a Paris Linnæan member, invite to their chemical laboratory, all horticulturists who are to be the best judges of their vegetable earths, whether lime, clay, alumine, or magnesia predominate in them; having besides some inflammable or oxygenated metallic bases, besides vegetable and animal matters. That these elements, with a great deposition from other earths and carbone, &c. are the principal support of plants, is evident by the gramineous kind, which contain so much siliceous earth, whilst their nutritive and circulating fluids, if analyzed, are found to be binary, or such other compounds as always constitute organic animal or

vegetable matter. The horticulturist should, therefore, be provided with his chemical laboratory, with acids, alkaline, and other compound tests, to make up, judge, and correct his composts, as the occasion will require.

5. The study of botany, so necessary to horticulturists, is next directed by our Linnæan friend, (Mons. Victor Auger,) in a far much easier method than that which is wrongly thought to be indispensably required for it, to wit: to be familiar with various systems of that science in Greek and Latin vocabularies; to collect quantities of plants; to dry them up in large herbaria; to purchase extensive libraries and floras; and to be possessed, in fine, with all that appertain to transcendent botany. With such means, the transcendent botanist knows, after all, much less of the plants than a simple horticulturalist, in the very ground which he treads upon, because his memory is overloaded with distant, unconnected, and superfluous materials, instead of which, he should have applied himself to the knowledge of indigenous plants, before the exotic; content himself to designate them with vernacular and practical names, to class them in a natural, in preference to an artificial method; by their flower, or by their use; by their size, or by their duration; by their habits, or by their localities; even by their popular attributes; for it is a fact, that in any existing language, the ordinary name of a plant is most significative of any of the above characters or attributes. The ancients had not a better method to study botany since the days of Theophrastus, to the age of Tournefort, Linnæus and Jussieu. I have no doubt but the celebrated Bernardin de St. Pierre could have introduced a fourth system of nomenclature in botany—that of classing plants by the roots, which in general present a great variety of substance and forms, had he not found in time, that it was absurd to be obliged to pull up a plant from the ground before he could class it! Still Bernardin de St. Pierre was a great botanist. This fact shows that there is no natural method that can oppose the progress of study in botany, while the artificial systems frequently obstruct or retard the acquaintance with individuals.

When that amiable and fascinating science has thus been studied, and with the help only of distinct designation or structure of parts, the knowledge of *exotics* can be introduced and added to the acquired stock. These are like strangers, who with their names, titles and decorations, are hospitably received by the horticulturist, to whom attention will be paid, and also to their scientific and systematic appendages, whether of the Linnæan or of Jussieu's denomination. There will be no difficulty for him to dispose of this great accession of individuals, in one way or another, because his mind is now already accustomed to methodize and arrange families of plants by their most striking and similar features, subjecting, however, the whole of them to his parental discipline, for the preservation of order, and for all the good purposes of his labours and avocations!

Such is, Mr. President, the respectful homage which, from the last annals, and in the name of the L. S. P. I this day humbly submit to the N. Y. H. Society. I have to add my own thankful acknowledgment for this inauguration of our bust of Linnæus, the first introduced in this city, and the perfect image of the greatest instructor of mankind in botany and horticulture. When Plato opened his academic school in a private garden of Academus, in the vicinity of Athens, he wished that the image of Socrates should be the best ornament of it. Thus you have gloriously admitted the image of Linnæus. The northern regions where he was born, often create Boreal lights, to the astonishment of the equatorial and southern inhabitants of the world. Exactly like them, this great man and almost divine mind, has enlightened mankind on the only order in which the Almighty Creator of the world has performed all its wonders. *Deus creavit, Linnæus disposuit.* This image, gentlemen, from the statue of marble erected to his memory by his sovereign, who could not possess a greater subject in his realms, is actually crowned by the twenty-four classes or divisions of the whole vegetable kingdom, thus happily entwined by a N. Y. horticulturist, as an emblem of his absolute dominion over it.

O Linnæus! the world in its successive revolutions every where can offer the ruins of cities, temples, pyramids, with those of prostrated columns, gorgeous palaces, and mausolea. But the sight of thy gardens is not done away—they are incessantly renewed with a greater luxuriance. May thy genius preside over us, and there always will be a bountiful soil for a plant, a fertile country for a nation, and a cultivated ground, with a hut for the poor.